CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- At time of the Action: Claims 1-58.

- After this Response: Claims 1-21, 24-33, 42, 45-51, 54-58.

Canceled or Withdrawn claims: 22, 23, 34-41, 43, 44, 52, 53.

Amended claims: 1, 4, 19, 42, and 50.

New claims: none.

Claims:

1. (CURRENTLY AMENDED) A method for automatic production of one or more sets of instructions for an input filter of a computer system, the method comprising:

obtaining input-description-data, which define the properties of valid input directly provided by a computing component without human intervention;

transforming the input-description-data into a data structure, wherein the data structure is an organized representation of the input-description-data;

~~with~~ from the organized representation of the input-description-data of the data structure, automatically generating a set of instructions for filtering input directly provided by a computing component without human intervention based upon the properties of valid input defined by the input-description-data.

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2.   (ORIGINAL)   A method as recited in claim 1, wherein the generating comprises translating the organized representation of the input-description-data of the data structure into the set of instructions.

3.   (ORIGINAL)   A method as recited in claim 2, wherein the translating comprises:

parsing the organized representation of the input-description-data of the data structure to acquire the input-description-data;

synthesizing the set of instructions based upon the input-description-data acquired by the parsing.

4.   (CURRENTLY AMENDED) A method as recited in claim 1 further comprising storing the ~~data structures~~ data structure in a persistent form.

5.   (ORIGINAL)   A method as recited in claim 1, wherein the data structure is in a hierarchical markup language.

6.   (ORIGINAL)   A method as recited in claim 1, wherein the set of instructions as an input filter.

7.   (ORIGINAL)   A method as recited in claim 1 further comprising loading the set of instructions as an input filter.

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8. **(ORIGINAL)** A method as recited in claim 1, wherein the set of instructions is generated with regard to filtering input for an application program module.

9. **(ORIGINAL)** A method as recited in claim 1, wherein input-description-data define the properties of input selected from a group consisting of valid input only, invalid input only, and both valid and invalid input.

10. **(ORIGINAL)** A method as recited in claim 1, wherein the properties of valid input indicate parameters of input by defining boundary delimitations of such parameters and define assumptions regarding such parameters.

11. **(ORIGINAL)** A method as recited in claim 1, wherein during the obtaining, input-description-data is obtained from a user via a graphical user interface.

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12. **(ORIGINAL)** A computer system comprising:

an application program module configured to receive and respond to input provided by a computing component;

an input filter module configured to receive input provided by a computing component for the application program module, filter the input, and pass the filtered input to the application program module,

wherein the filter comprises one or more sets of instructions that, when executed, filter the input and such sets of instructions being automatically produced according to the method as recited in claim 1.

13. **(ORIGINAL)** A computer system as recited in claim 12, wherein the computer system comprises a Web server.

14. **(ORIGINAL)** A computer system as recited in claim 12, wherein the input filter module is further configured to receive input from the computing component via a communications network.

15. **(ORIGINAL)** A computer-readable medium comprising a set of instructions for filtering input, wherein such set of instructions has been automatically produced by the method as recited in claim 1.

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16. (ORIGINAL) An input filter of a computer having computer-executable instructions that, when executed, filter input, wherein such computer-executable instructions were automatically produced by the method as recited in claim 1.

17. (ORIGINAL) A computer comprising one or more computer-readable media having computer-executable instructions that, when executed by the computer, perform the method as recited in claim 1.

18. (ORIGINAL) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 1.

19. (CURRENTLY AMENDED) A method facilitating speedy and efficient production of one or more sets of instructions for an input filter of a computer system, the method comprising:

obtaining input-description-data, which define the properties of valid input provided by a computing component;

transforming the input-description-data into a data structure;

storing the data structures in a persistent form;

automatically generating a set of instructions for filtering input provided by a computing component based upon the properties of valid input defined by the input-description-data, wherein the generating acquires the properties for generating the set of instructions from the data structure.

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20. **(ORIGINAL)** A method as recited in claim 19 further comprising transforming the input-description-data into a data structure

21. **(ORIGINAL)** A method as recited in claim 20, wherein the data structure is in a hierarchical markup language.

22. **(CANCELED)**

23. **(CANCELED)**

24. **(ORIGINAL)** A method as recited in claim 19 further comprising loading the set of instructions as an input filter.

25. **(ORIGINAL)** A method as recited in claim 19, wherein the properties of valid input indicate parameters of input by defining boundary delimitations of such parameters and define assumptions regarding such parameters.

26. **(ORIGINAL)** A method as recited in claim 19, wherein during the obtaining, input-description-data is obtained from a user via a graphical user interface.

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27. (ORIGINAL)   A computer-readable medium comprising a set of instructions for filtering input, wherein such set of instructions has been automatically produced by the method as recited in claim 19.

28. (ORIGINAL)   An input filter of a computer having computer-executable instructions that, when executed, filter input, wherein such computer-executable instructions were automatically produced by the method as recited in claim 19.

29. (ORIGINAL)   A computer system comprising:

an application program module configured to receive and respond to input provided by a computing component;

an input filter module configured to receive input provided by a computing component for the application program module, filter the input, and pass the filtered input to the application program module,

wherein the filter comprises one or more sets of instructions that, when executed, filter the input and such sets of instructions being automatically produced according to the method as recited in claim 19.

30. (ORIGINAL)   A computer system as recited in claim 29, wherein the computer system comprises a Web server.

31. (ORIGINAL) A computer system as recited in claim 29, wherein the input filter module is further configured to receive input from the computing component via a communications network.

32. (ORIGINAL) A computer comprising one or more computer-readable media having computer-executable instructions that, when executed by the computer, perform the method as recited in claim 19.

33. (ORIGINAL) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 19.

Claims 34-41 are CANCELED

42. (CURRENTLY AMENDED) An automatic filter-instructions production system comprising:

an user interface for obtaining input-description-data, which define the properties of valid input provided by a computing component;

a transformer configured to transform the input-description-data into a data structure;

a memory, wherein the memory is configured to store the data structure;

a filter-instructions automatic generator ("autogen") configured to automatically generate a set of instructions for filtering input provided by a

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computing component based upon the properties of valid input defined by the input-description-data, wherein the filter-instructions autogen is further configured to acquire the properties from the data structure when automatically generating the set of instructions.

43. (CANCELED)

44. (CANCELED)

45. (CANCELED)

46. (ORIGINAL)   A system as recited in claim 42, wherein the input-description-data indicate input parameters by defining boundary delimitations of such parameters and define assumptions regarding such parameters.

47. (ORIGINAL)   A computer-readable medium comprising a set of instructions for filtering input, wherein such set of instructions has been automatically produced by the system as recited in claim 42.

48. (ORIGINAL)   An input filter of a computer having computer-executable instructions that, when executed, filter input, wherein such computer-executable instructions were automatically produced by the system as recited in claim 42.

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49. (**ORIGINAL**) A system as recited in claim 42, wherein the interface is a graphical user interface.

50. (**CURRENTLY AMENDED**) A system for facilitating the production of one or more sets of instructions, the system comprising:

a memory comprising a set of computer program instructions; and

a processor coupled to the memory, the processor being configured to execute the computer program instructions, which comprise:

~~obtaining input-description-data, which define the properties of valid input;~~

~~automatically generating a set of instructions for filtering input provided by a computing component based upon the properties of valid input defined by the input-description-data.~~

obtaining input-description-data, which define the properties of valid input provided by a computing component;

transforming the input-description-data into a data structure;

storing the data structures in a persistent form;

automatically generating a set of instructions for filtering input provided by a computing component based upon the properties of valid input defined by the input-description-data, wherein the generating acquires the properties for generating the set of instructions from the data structure.

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51. (ORIGINAL) A system as recited in claim 50, wherein the input-description-data indicate input parameters by defining boundary delimitations of such parameters and define assumptions regarding such parameters.

52. (CANCELED)

53. (CANCELED)

54. (ORIGINAL) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method comprising:

obtaining input-description-data, which define the properties of valid input provided by a computing component;

automatically generating a set of instructions for filtering input provided by a computing component based upon the properties of valid input defined by the input-description-data.

55. (ORIGINAL) A computer-readable medium as recited in claim 54, wherein the method further comprises loading the set of instructions as an input filter.

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56. (ORIGINAL) A computer-readable medium as recited in claim 54, wherein the input-description-data indicate input parameters by defining boundary delimitations of such parameters and define assumptions regarding such parameters.

57. (ORIGINAL) An input filter comprising a computer-readable medium as recited in claim 54.

58. (ORIGINAL) A computer comprising one or more computer-readable media as recited in claim 54.

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